# VISVESVARAYA TECHNOLOGICAL UNIVERSITY
## BELAGAVI – 590 018

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PROJECT REPORT

ON

# "MINI CONVEYOR BELT"

*Submitted in partial fulfillment of the requirements for the award of the degree of*

**BACHELOR OF ENGINEERING**

**IN**

**MECHANICAL ENGINEERING**


**Submitted by:**

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**Shridevi Institute of Engineering and Technology**

**(Recognized by Government of Karnataka, Affiliated to VTU, Belagavi& Approved by AICTE, New Delhi)**

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# CERTIFICATE

This is to certify that the Project Work entitled **"Mini Conveyor Belt"** is carried out by **Mr Anjan Kumar H H (1SV19ME001), Mr Venugopal S V (1SV18ME012)**, bonafide students of the **Department of Mechanical Engineering** in partial fulfillment of the requirements for the award of the degree of **Bachelor of Engineering** in **Mechanical Engineering** of the **Visvesvaraya Technological University, Belagavi** during the year **2021 – 22**. It is also certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the Report deposited in the departmental library. The project report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the said Degree.

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**External Viva**

| Names of the Examiners | Signature with date |
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| 1. | |
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# CHAPTER - 1

# INTRODUCTION

The Geneva mechanism is a gear mechanism that translates a continuous rotation into an intermittent rotary motion. The rotating drive wheel has a pin that reaches into a slot of the driven wheel advancing it by one step. The drive wheel also has a raised circular blocking disc that locks the driven wheel in position between steps.

Geneva mechanism has many applications such as in watches, projector, etc. But we used Geneva mechanism for converting rotary motion into an intermittent motion in production line. Geneva mechanism can be used in material handling in an industry. The proposed concept will help in production line where many workers are used for the material handling purpose it also reduce the cost and threshing time requirement of more number of worker will be completely eliminated as only two workers can carried out the complete operation.

Generally a belt conveyor consists of a motor to drive the rollers and in our project a handle is attached to driving wheel. By using hand we operate the conveyor.

## 1.1 INTRODUCTION OF GENEVA MECHANISM

The Geneva mechanism is one of the earliest of all intermittent motion mechanisms and when input is in the form of continuous rotation, it is probably still the most commonly used. Geneva is available in variety of sizes. They are cheaper than cams or star wheels and have adequate to good performance characteristics, depending on load factors and other design requirements. Figure 1.1.1 shows the typical four slot external Geneva.

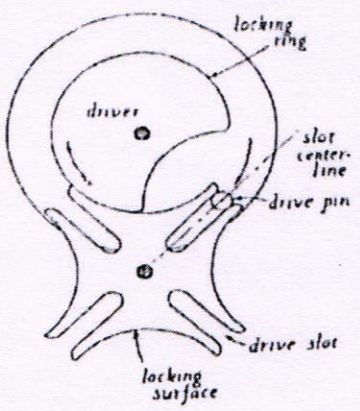


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**Figure 1.1: Geneva mechanism**